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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/882,375	06/15/2001	Christopher Peiffer	RLN 310	6733
23581	7590	12/14/2004	EXAMINER	
KOLISCH HARTWELL, P.C. 520 S.W. YAMHILL STREET SUITE 200 PORTLAND, OR 97204			PATEL, HARESH N	
			ART UNIT	PAPER NUMBER
			2154	

DATE MAILED: 12/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

SK

Office Action Summary

Application No.

09/882,375

Applicant(s)

PEIFFER ET AL.

Examiner

Haresh Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 25 and 26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 25 and 26 are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-26 are presented for examination.

Priority

2. Applicant's claim for domestic priority under 35 U.S.C. 119(e) is acknowledged. However, for example, "optimal server socket" and other claimed subject matter are not disclosed in the provisional application; hence, applicant does not benefit the effective date as the provisional priority date.

Specification

3. Unless the invention is created from scratch, applicant needs to provide all the prior arts that have led to the invention, i.e., existing patents and publications related to the claimed subject matter and the figure 1. In response, applicant is requested to provide the title, citation and copy of each publication related to the claimed subject matter. For each publication, please provide a concise explanation of that publication's contribution to the description of the prior art.

Appropriate correction is required.

4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The present title is not sufficient for proper classification of the claimed subject matter.

5. The abstract is objected. Some of the informalities are:
 - a. The abstract should not contain terms, like, "may be".

Appropriate correction is required.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spencer, 5,826,261 in view of "Official Notice".

8. As per claim 1, Spencer teaches the following:

a computer networking device for use on a computer network connecting a client and a server (e.g., figure 1), the client and server client being configured to communicate using protocol (e.g., figure 6), the computer networking device comprising,

a protocol multiplexor/demultiplexor (e.g, query router, figure 6) configured to receive protocol requests from the client and to distribute those requests over a plurality of TCP connections to a plurality of corresponding interfaces on the server (e.g., figure 6).

However Spencer does not specifically show the use of a HTTP protocol and a socket. "Official Notice" is taken that both the concept and advantages of providing HTTP protocol and a socket is well known and expected in the art.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include HTTP protocol and a socket with the teachings of Spencer in order to

facilitate requests and responses to use the well-known HTTP protocol and the network devices communicating using sockets. Spencer very clearly provides the concept of a router/gateway that takes the queries from the client(s), parses the query, among several databases, distributed over the network, collects the responses from the databases, merges the responses from the databases, and then forwards the combined responses back to the requesting query operator. The well-known concept of using HTTP protocol over the network would help the requests and responses to be sent among the network devices. The well-known concept of using sockets of the network devices over the network would allow the devices to communicate with each other.

9. As per claim 2, Spencer teaches the following:

the multiplexor/demultiplexor is further configured to receive protocol responses from the server over a plurality of TCP connections and to route those responses to the client via a single TCP connection (e.g., figure 6).

10. As per claim 3, Spencer teaches the following:

receiving a series of protocol requests from an originating client (e.g., queries from a client, col., 3, lines 7 – 40), and routing the series of requests to a plurality of sockets on a server via a plurality of TCP connections (e.g., col., 9, lines 16 – 33).

11. As per claim 4, Spencer teaches the claimed limitations recited under claim 3.

However, Spencer does not specifically mention about the requests are routed based on a

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parameter selected from the group consisting of least-lengthy response time, last- accessed socket, fewest number of unfulfilled requests, type of requested data, and size of requested data.

“Official Notice” is taken that both the concept and advantages of providing the requests are routed based on a parameter selected from the group consisting of least-lengthy response time, last- accessed socket, fewest number of unfulfilled requests, type of requested data, and size of requested data is well known and expected in the art.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the requests are routed based on a parameter selected from the group consisting of least-lengthy response time, last- accessed socket, fewest number of unfulfilled requests, type of requested data, and size of requested data with the teachings of Spencer in order to facilitate requests and responses to provide the optimal path and fastest response. Also, the well-known techniques, such as, routing based on least-lengthy response time, last- accessed socket, fewest number of unfulfilled requests, type of requested data, or size of requested data, would benefit most favorable communication over the network among the network devices.

12. As per claim 5, Spencer teaches the following:

receiving protocol responses over a plurality of connections from the server and routing the responses to the originating client (e.g., figure 6).

13. As per claims 6, 9-14, Spencer teaches the following:

a computer networking method for data transfer between an originating client, a server, and a networking device positioned intermediate the client and the server on a computer network (e.g., figures 1 and 6), the method comprising:

at the networking device (e.g., query router, figure 6), listening for a series of protocol requests from the originating client (e.g., queries from client, col., 3, lines 7 – 40), receiving the series of protocol requests from the originating client (e.g., queries from client, col., 3, lines 7 – 40) demultiplexing the series of protocol requests into discrete protocol requests (e.g., query router parsing query, figure 6); and sending each discrete protocol request to an interface of server (e.g., parsed query contents sent to different network devices, col., 9, lines 16 – 33).

However Spencer does not specifically show the use of a HTTP protocol, handling responses/requests from a plurality of sockets and determining an optimal socket. “Official Notice” is taken that both the concept and advantages of providing the use of a HTTP protocol, handling responses/requests from a plurality of sockets and determining an optimal socket is well known and expected in the art.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the use of a HTTP protocol, handling responses/requests from a plurality of sockets and determining an optimal socket with the teachings of Spencer in order to facilitate requests and responses to use the well-known HTTP protocol and the network devices communicating using sockets. Spencer very clearly provides the concept of a router/gateway that takes the queries from the client(s), parses the query, among several databases, distributed over the network, collects the responses from the databases, merges the responses from the databases, and then forwards the combined responses back to the requesting query operator. The well-

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known concept of using HTTP protocol over the network would help the requests and responses to be sent among the network devices. The well-known concept of using sockets of the network devices over the network would allow the devices to communicate with each other. The well-known techniques for determining an optimal socket, such as, routing based on least-lengthy response time, last- accessed socket, fewest number of unfulfilled requests, type of requested data, or size of requested data, would benefit most favorable communication over the network among the network devices.

14. As per claims 7, 18, Spencer teaches the following:

receiving and sending occur via TCP connections (e.g., col., 9, lines 16 – 33).

15. As per claims 8, 19, Spencer teaches the claimed limitations rejected under claims 7 and 18. However, Spencer does not specifically mention about the TCP connections being persistent. “Official Notice” is taken that both the concept and advantages of providing the TCP connections being persistent is well known and expected in the art.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include TCP connections being persistent with the teachings of Spencer in order to facilitate reliable TCP communications among the network devices. The well-known concept of TCP connections being persistent would benefit trustworthy communications.

16. As per claims 15, 16, Spencer teaches the following:

multiplexing the protocol responses from the plurality of server sockets into a series of protocol responses (e.g., combining query responses to send back to the requesting client, figure 6),

sending the series of HTTP responses to the originating client (e.g., combining query responses to send back to the requesting client, figure 6).

17. As per claims 17, 18, 21-24, Spencer teaches the following:

a computer networking method / device for data transfer between an and an intermediate networking device wherein the originating client, a server, originating client and the server are configured to communicate over a computer network via the intermediate networking device (e.g., figure 1), the method comprising:

at the intermediate networking device, listening for a series of protocol requests from the originating client (e.g., query router, figure 6);

receiving the series of protocol requests from the originating client (e.g., queries from client, col., 3, lines 7 – 40);

demultiplexing the series of protocol requests into discrete protocol requests (e.g., query router parsing query, figure 6),

determining an interface for each discrete protocol request; sending each discrete protocol request to the interface for the request (e.g., parsed query contents sent to different network devices, col., 9, lines 16 – 33),

listening for protocol responses from a plurality of server interfaces (e.g., listening for query responses from network device databases, figure 6),

receiving the protocol responses from the plurality of server interfaces (e.g., receiving responses from network device databases, figure 6),

multiplexing the protocol responses from the plurality of server interfaces into a series of protocol responses (e.g., combining query responses to send back to the requesting client, figure 6); and

sending the series of protocol responses to the originating client (e.g., combining query responses to send back to the requesting client, figure 6).

However Spencer does not specifically show the use of a HTTP protocol, handling responses/requests from a plurality of sockets and determining an optimal socket. "Official Notice" is taken that both the concept and advantages of providing the use of a HTTP protocol, handling responses/requests from a plurality of sockets and determining an optimal socket is well known and expected in the art.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the use of a HTTP protocol, handling responses/requests from a plurality of sockets and determining an optimal socket with the teachings of Spencer in order to facilitate requests and responses to use the well-known HTTP protocol and the network devices communicating using sockets. Spencer very clearly provides the concept of a router/gateway that takes the queries from the client(s), parses the query, among several databases, distributed over the network, collects the responses from the databases, merges the responses from the databases, and then forwards the combined responses back to the requesting query operator. The well-known concept of using HTTP protocol over the network would help the requests and responses to be sent among the network devices. The well-known concept of using sockets of the network

devices over the network would allow the devices to communicate with each other. The well-known techniques for determining an optimal socket, such as, routing based on least-lengthy response time, last-accessed socket, fewest number of unfulfilled requests, type of requested data, or size of requested data, would benefit most favorable communication over the network among the network devices.

18. As per claims 25 and 26, Spencer teaches the following:

a computer networking device (e.g., query router, figure 6) for improving data transfer via a computer network (e.g., figures 1 and 6), the device being configured to receive protocol requests from a client (e.g., queries from client, col., 3, lines 7 – 40), to determine socket for each protocol requests, and to send each protocol request to the determined socket for the request (e.g., parsed query contents sent to different network devices, col., 9, lines 16 – 33),

receive a response from the socket (e.g., query response sent to the client, col., 9, lines 16 – 33), and to send the response to the client (e.g., query response sent to the client, col., 9, lines 16 – 33).

However Spencer does not specifically show the use of a HTTP protocol, handling responses/requests from a plurality of sockets and the socket being an optimal server socket. “Official Notice” is taken that both the concept and advantages of providing the use of a HTTP protocol, handling responses/requests from a plurality of sockets and determining an optimal server socket is well known and expected in the art.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the use of a HTTP protocol, handling responses/requests from a plurality of

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sockets and determining an optimal sever socket with the teachings of Spencer in order to facilitate to provide the optimal path and fastest response for the requests and responses using the well-known HTTP protocol. Spencer very clearly provides the concept of a router/gateway that takes the queries from the client(s), parses the query, among several databases, distributed over the network, collects the responses from the databases, merges the responses from the databases, and then forwards the combined responses back to the requesting query operator. The well-known concept of using HTTP protocol over the network would help the requests and responses to be sent among the network devices. The well-known concept of using sockets of the network devices over the network would allows the devices to communicate with each other. The well-known techniques for determining an optimal sever socket, such as, routing based on least-lengthy response time, last- accessed socket, fewest number of unfulfilled requests, type of requested data, or size of requested data, would benefit most favorable communication over the network among the network devices.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Haresh Patel whose telephone number is (571) 272-3973. The examiner can normally be reached on Monday, Tuesday, Thursday and Friday from 10:00 am to 8:00 pm.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Haresh Patel

December 10, 2004


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